

SCHOOL OF PUBLIC AFFAIRS COLLEGE OF PUBLIC PROGRAMS

YOUNG STEWARD OF PUBLIC POLICY SCHOLARSHIP AWARD PROGRAM

First Place Award 2008-2009

KIMBERLY WAITHE
Chandler High School, Chandler, Arizona

WATER CONSERVATION

Water conservation is a critical issue to Arizona. The dwindling supply of Colorado River water combined with agricultural needs and population growth will become more of a problem in the future if policy makers and Arizonans do not step in to conserve water. The issue of conservation of Colorado River water affects Arizona's citizens, the agriculture industry, and the ecosystems along the Colorado River.

Population growth in Arizona is a major issue with water conservation. Arizona is one of the twelve fastest growing states. To supply the millions of people who live in Arizona with water, water must be transferred from agriculture as the population continues to increase. Taking water from agriculture has consequences such as reduced food production capability. Agricultural water rights have steadily decreased since 1968 while municipal water rights have increased.

Colorado River water is crucial to Arizona's agricultural industry. The farming industry is very dependent on Colorado River water; eighty percent of Arizona's apportionment of Colorado River water is used for agriculture. Arizona's farmers grow a number of crops including cotton, wheat, barley, alfalfa, lettuce, cauliflower, and citrus. At least three of these crops require copious amounts of water. Just one pound of wheat requires one hundred thirty pounds of water. Alfalfa and lettuce are also high water crops. Over the past few years an average of 500,000 acres of lettuce was planted. As Arizona's population increases, the amount of Colorado River water available for agriculture will continue to decrease; eventually changes will have to be made.

Water conservation is important not only to supply the growing population or the agricultural industry, but for the benefit of the ecosystems that depend on the Colorado River. The Colorado River provides for the environment around it. The totoaba and the corvina are two species of fish that depend on the Colorado River. Due to less available water, the population of these species is declining. Plants and animals that live along the Colorado River are experiencing a detrimental change in their ecosystem. The Colorado River Delta, formerly a fertile region, is now in decline because much less river water reaches it. Animals such as the bobcat, beaver and other fish species have lost their habitat due to the poor state of the Delta.

Water conservation is a critical issue for Arizona. Water is our most valuable resource, and to preserve it the Colorado River must be used wisely. Arizona policy makers must work with the citizens to reverse the current situation and prepare for future generations. Arizona must set the example for other southwestern states. Arizona can implement water conservation strategies and urge other states that use Colorado River water to follow suit. Instead of focusing on population changes, whether growth or decay, Arizona should be prepared to provide water for its citizens no matter the amount of people living in the state. Policy makers should decide how best to divide the water between the people and agriculture as well as how to conserve water for the ecosystem. One way to do this is to re-assess the crops grown in Arizona. Perhaps high water crops such as wheat and alfalfa could be replaced with less water-dependent crops. Also, there should be greater focus on the crops that require less water. Policy makers should assess which crops will generate the most amount of profit for the least amount of water. More funding should be allocated for research on water conservation techniques. Scientist working on direct to root watering techniques that would decrease the amount of water lost to evaporation should have more funding. Water is Arizona's most precious resource; it must be conserved for Arizona to continue to thrive.